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88-6

ENEMIES AND FRIENDS: A TALE OF TWO CEMETERIES

Martin Cooper and Shawn Austin
Archaeological Services Inc.

This month we are treated to two speakers, and two reports. Prominent of these is a report on the Snake Hill cemetery dug this time last year. This American War of 1812 soldier's cemetery received international press attention. Here is your chance to get the inside story! Also, we will be hearing about a Quaker's cemetery recently excavated in the Toronto area. So come on out for our last speaker night of 1988 (next month is our annual Christmas Party). As usual, the meeting will be held at the Museum of Indian Archaeology, on November 10 at 8pm.

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EXECUTIVE REPORT

As promised last issue (and the issue before), enclosed at the end of this newsletter is the 1988 London Chapter mailing list. Since the last issue of KEWA, we have welcomed three new members, and so the total for members-subscribers now hovers around the 150 mark. While this should be reason to be satisfied, the good news that our membership continues to increase is somewhat tainted by the fact that, even excluding all other Chapter expenses, membership dues are still only paying for approximately 75% of the cost to produce KEWA. In real dollar terms, the Chapter suffers a loss of approximately $600 a year. Since monies made from Occasional Publications are still paying off original production costs, other Chapter operating fees (ie. social events, speaker night, etc.), or are put into upcoming issues of the series, the Chapter is therefore not able to re-coup this $600 annual loss, meaning a slow but real depreciation of our bank assets.

Consequently, the Executive have spent their last two meetings attempting to come up with a solution to this problem. We acknowledge that the main reason for our high membership is due to the quality of our newsletter. However, some cost-cutting measures considered would reduce the quality and quantity of KEWA, something that may cause our membership to decrease. The other option considered was an annual fee increase, although this too may impact membership. The only clear-cut resolution reached so far is that the Chapter cannot afford to maintain the status quo. Given the above, the Executive has decided to seek direction from the membership. Those who have been members for sometime will recall that in the past we often solicited your thoughts through the use of a questionnaire. It is our desire to do so again. So, you will find attached to the back of this newsletter a questionnaire regarding possible alternative directions the Chapter can go. We strongly encourage you to answer the questionnaire and return it promptly to the Chapter office, so that a course of action can be identified for the new year.

Since we've mentioned the new year, this is a preliminary reminder to all members that the Chapter must once again elect an Executive for 1989. ALL Executive positions are open and any member in good standing with the main body of the OAS can hold an Executive position. Don't be shy, apathetic, etc.; in this season of elections let the bug bite you and come forward...it isn't all that much work! Wouldn't it be novel and potentially entertaining to actually have an election for once?!! Chapter Executive nominating committee chairperson Christine Dodd will be accepting nominations between now and December 12th. Anyone interested in nominating themselves or another member of the Chapter can reach Christine at home at 434-8853, or by leaving a message for her at 433-8401.

Finally, the Executive would like to thank everyone who volunteered on the Van Bemmel site over the last summer. Excavations are winding down now, and should be completed by mid-November. Once again our work was productive. The most important find of the excavations appears to be a palisade wall which surrounds the main activity area of the site. The presence of a palisade, particularly at such a short-term, hunting-processing camp, is unheard of and is an important contribution to our understanding of these Late Woodland Western Basin peoples. Of course, anyone interested in coming out to the site and helping with the final work is most welcome. Contact Neal at 433-8401 for further information.

With the conclusion of the Van Bemmel project the London Chapter Executive was planning to solicit ideas for new field projects. Unfortunately, with the current upheaval going on concerning licencing procedures, the Chapter is hesitant to embark on a new project, only to be told later that we do not fit a proper criteria for holding a licence. Consequently field projects will remain on hold until further notice is forthcoming concerning archaeological licencing in this province.

SOCIAL REPORT

While Occasional Publication #5 continues to move along at slightly less than the speed of a dried slug, some minor advances have been made: in particular, a final title for the volume has been set. Occasional Publication #5 is to be known as **The Native Archaeology of Southern Ontario to AD 1650.** You may love it, you may hate it, but we are now announcing a chance for you to contribute to it! Yes, its the **DESIGN A COVER FOR OUR PREHISTORY VOLUME CONTEST!!.** The intention of the contest is to come up with a tasteful, striking, meaningful, yet not tacky cover for Occasional Publication #5. As this volume will tell the tale of southern Ontario's prehistory, we are looking for some graphic work that can convey the notion of southern Ontario; its rich and diverse prehistory; the London Chapter of the Ontario Archaeological Society; and the importance of the volume. All artwork should be inked, and capable of being reproduced as the cover of the volume. As the cover will be approximately 8 1/2 by 11 inches, and there must be room to allow for volume title, editor and publishing information, the artwork should be able to be reduced into an approximate 7 1/2 by 6 1/2 inch setting. Contest closes January 12th 1989 and competitors can submit as many entries as they wish. So get out your pens and ideas, and send in your concepts. Winner of the contest will receive a free copy of Occasional Publication #5, and a free year's membership to the London Chapter. Send your entries to: London Chapter OAS, 55 Centre Street, London Ontario, N6J 1T4.

As we approach the end of 1988, it is time to start planning for our annual Christmas party. As usual, we are seeking a location to host this event. If you have a home which could accomodate 15 to 30 pleasant and polite archaeologists and loved ones for an evening of merry-making and seasonal cheer, and are willing to open your doors in this season of giving (sheesh!), please contact our Director, Pat Weatherhead, at home (438-4817), or by leaving a message at the Chapter office (433-8401).

On a final note, a reminder to all Chapter members that, during the month of December, Chapter Lab Nights are cancelled. They will start up again on January 19th, the week after our January speaker night. Until December, Lab Nights continue, so come on out and spend an evening immersed (literally) in Ontario's prehistory.

EDITOR'S NOTE

This issue provides a couple of efforts by the London Chapter President. Con-script-ed into writing this entire **KEWA**, our president is now seeking retirement from newsletter production for the next two or three months, mumbling something about "...great lost MA thesis... Ojibwa seasonal round... Avoiding the Wrath of a certain York University geographer... etc." As a result, the **KEWA** production committee could use some help in producing the next three issues. Pat Weatherhead is busily working on November's issue of three osteological reports, and we may get another report camera ready (right Chris?). We may even have something lined up for January. But help is still needed producing the issues, and we certainly can use some research articles for the next few months of **KEWA**. So, any help in the way of articles submitted or elbow-grease provided would be most appreciated!

SOUTHWESTERN ONTARIO RADIO-CARBON DATES V

Neal Ferris

This article is intended to be a continuation to the previous four such articles published in this newsletter by Fox (1978; 1980; 1982; 1983). Since the time of the last radio-carbon report, a substantial number of dates have been run from sites in southwestern Ontario. In the tradition of the earlier articles, the same format is followed here. Dates are broken down into chronological and cultural periods. References are provided when available, otherwise the principal researcher is listed. Sample context, lab number and results are provided, and an asterisk is placed next to a result when the researcher has rejected the date.

Also in keeping with the previous articles, the resulting dates have not been calibrated, but simply translated into calendrical years by subtracting the lab's BP date from 1950 AD. Those wishing to calibrate dates are welcome to do so. In recent years, the Klein et al 1982 calibration formula has been the method of choice, however, a more recent calibration method is also available (Stuiver and Kra 1986). This method operates under more basic principles than does the Klein method, attempting only to sort out and calibrate the numbers achieved in the lab, without smoothing or standardizing the resulting curve, as the Klein method does. For the archaeologist, this means calibrated dates under the newer formula can provide two or three intercept ranges along the c14 curve, which will be difficult to interpret. Unfortunately for the archaeologist wanting a simple, single date, the Stuiver and Kra method is considered to be the most accurate calibration now available (Rippeteau 1988).

One of the more important recent dates obtained for southwestern Ontario listed below comes from the Late Archaic Crawford Knoll site, excavated by Ian Kenyon. Ian submitted two bone collagen dates to the Isotrace accelerator lab at the University of Toronto. The results from the first sample were encouraging, falling within the expected date range for this small point site. The other date, however, is more than a little off; although the ± 100 years would suggest that this a very accurate inaccuracy. Unfortunately, Ian is not willing to accept as a possibility that Crawford Knoll represents the earliest site yet documented in southwestern Ontario! The other two Late Archaic sites listed, while providing acceptable dates, are related to occupational layers at sites which failed to yield diagnostic material, consequently their value is somewhat limited, although providing useful information on early Lake Erie water levels.

A recent trend in radio-carbon dates is the growing number of samples run from Western Basin Tradition sites in southwesternmost Ontario, particularly related to the Younge and Springwells phases. A number of these recently dated samples were found in direct association with large portions of diagnostic ceramic vessels, thus assisting in providing not only a date range for the respective phases, but also useful information in seriating ceramic trends. Regarding some of the specific dates obtained, the researchers of the Robson Road site indicate that the Middle Woodland and Riviere phase Late Woodland dates from that site are acceptable, although they fall between a hundred and two hundred years later than anticipated. Each of these features could only provide a little more than 3 grams of carbon for dating. Thus the samples could not be treated for humic acids. It has been suggested that if humic acid could not be treated, the resulting dates could be somewhat later than anticipated (H. Melville, pers. comm.), and this is believed to be the case. Nevertheless, these dates seriate well with those obtained from features containing later Younge and Springwells ceramics at Robson Road, and are thus given provisional acceptance by the researchers.

Of the dates obtained for the Younge and Springwells phase, the only one that is at odds with the general pattern is the 840 A.D. date obtained for the Van Bemmel site. However, the material from Van Bemmel appears to be early Younge phase, and the date range fits well with the notion put forth by Murphy and Ferris (n.d.) that the Younge phase is more properly defined as begining somewhere between 800 and 900 A.D., rather than the more traditional notion of starting at 1000 A.D. Thus this date is also provisionally accepted, although further radio-carbon dates from the site are planned.

Turning to the Iroquoian Late Woodland, the Princess Point dates from the Varden site are a confusing and difficult group of numbers to interpret. The large time range for each date and the number of dates rejected limit the value of the results. Combined with the Mohawk Chapel and Hunter site dates, however, the accepted dates from Varden (perhaps also including the researcher-rejected 530 A.D. date, RIDDL115) help document the range of this still poorly researched period.

Curiously, a large number of the post Glen Meyer Iroquoian dates have proved unsatisfactory. The eight dates from the Middleport site in particular are perplexing. Their tight, 160 year range is quite impressive, and would normally make any researcher quite happy. However, all the dates are about three hundred years too early for a Middleport site, particularly for the Middleport type site. Either a lab error has occurred, or else all the samples experienced a uniform contamination.

With this most recent installment, 216 accepted and rejected dates have been documented in KEWA. The breakdown of these dates by period reveals some interesting trends in southwestern Ontario archaeological research, and some problems with c14 dating. For instance, only 22.7% of the dates obtained in southwestern Ontario are for cultural periods prior to 1000 AD, and close to 60% of these have been rejected. While after 1000 AD, only 22% of the resulting dates have been rejected. Such an obvious bias towards the late prehistoric period is not so suprising, and perhaps reflects the abundance of datable charcoal samples from sites after 1000 AD, and the relative lack of it on sites prior to 1000 AD.

There are some curious patterns within the post-1000 AD dates. While Glen Meyer dates have a 92.3% acceptable accuracy range, dates pertaining to the Uren/Middleport/Late Prehistoric Neutral periods (lumped together to avoid differing interpretations of what defines these periods from each other) have only a 64.2% accuracy range. While part of this is obviously due to the eight rejected dates from the Middleport site, other rejected dates may have something to do with attempting to "fit" carbon dates into cultural periods spanning 200 years or less, particularly where researchers disagree over when one period ends and another begins. This is probably beyond the capacity of radio-carbon dating, thus a date that is a hundred years out for a Middleport site may be rejected because it "looks" more like a date from the Uren or Prehistoric Neutral periods. Be that as it may, the Glen Meyer, Younge and Springwells phases do consistently yield a high number of acceptable dates, even though these periods are believed to be chronologically as tight as the later Iroquoian periods. Whatever the reasons for the "poor" quality of dates obtained from post Glen Meyer Iroquoian sites, it would appear that a good understanding of the ceramic seriation for this period would be as, if not more, effective in dating both sites and the specific phases in question than conventional radio-carbon dates.

Perhaps the sorriest period of those that can reasonably be expected to produce dates is the Middle Woodland. Of the two complexes known for southwestern Ontario (Couture and Saugeen), only three acceptable dates have been obtained during the 1980's, while some of the dates obtained earlier in the 1970's are open to question.

Moreover, at least one of the two dates provided in this article is also questionable. Thus the Middle Woodland, for southwestern Ontario at any rate, is less well-documented than even the Late Archaic. In addition, the early Late Woodland Riviere phase is almost equally as poorly represented as the Middle Woodland, with only three dates, while the contemporaneous Princess Point phase is better off with 12 acceptable dates. Currently, the paucity of dates for the first milennium AD in southwestern Ontario reflects both the lack of research directed towards the period, and the difficult challenge these sites tend to offer archaeologists, in terms of extracting, in context, reliable quantities of carbon for testing. Hopefully efforts can be made to begin addressing this weakness in southwestern Ontario prehistory.

EARLY ARCHAIC

Allen (AfGx-50)		B. Parker	
(Wood)	IS-TO345	870 ± 50	1080 A.D.*
(Wood)	WAT1643	Modern	*

LATE ARCHAIC

Bonisteel (AfGu-2)		Jim and Sue Pengelly 1987	
Occupation Layer #2 firepit (Wood)	BGS986	3070 ± 120	1120 B.C.
Sandwolf		J. Pengelly	
Occupational Layer 1 (wood)	BGS1213	3400 ± 80	1450 B.C.
Small Point			
Crawford Knoll (AdHo-5)		I. Kenyon	
(Bone collagen)	IS-TO921	15120 ± 100	13170 B.C.*
(Bone collagen)	IS-TO920	3480 ± 120	1530 B.C.

EARLY WOODLAND

Ferris (BbHj-21)		Fox 1984b	
Feature 2 (Wood)	I13535	2420 ± 80	470 B.C.

MIDDLE WOODLAND

Couture Complex (Western Basin)			
Robson Road (AaHp-20)		Kenyon, Ferris and Hagerty 1988	
Feature 62 (Wood)	BGS1243	1380 ± 120	570 A.D.
Saugeen			
Pond Mills (AfHh-2)		D. Poulton	
Midden 303: 490-240 Layer 5 (Wood)	NMC1332	885 ± 80	1065 A.D.*
Midden 303: 490-240 Layer 5 (Wood)	NMC1333	1195 ± 75	755 A.D.

LATE WOODLAND

Western Basin Riviere Phase			
Robson Road (AaHp-20)		Kenyon, Ferris and Hagerty 1988	
Feature 40 (Wood)	BGS1244	960 ± 120	990 A.D.

Western Basin Younge Phase

Dick (AaHp-1)		Reid 1983	
Feature 12 (Corn)	I13242	930 ± 110	1020 A.D.
Robson Road (AaHp-20)		Kenyon, Ferris and Hagerty 1988	
Feature 22 (Wood)	BGS1245	850 ± 90	1100 A.D.
Van Bemmel (AcHm-31)		N. Ferris	
Feature 34 (Wood)	BGS1249	100 ± 70	1850 A.D.*
Feature 18 (Wood)	BGS1265	1110 ± 70	840 A.D.
Cherry Lane (AaHp-21)		N. Ferris	
Feature 14 (Wood)	BGS1266	770 ± 70	1180 A.D.
Feature 16 (Wood)	BGS1268	875 ± 70	1075 A.D.
Feature 27 (Wood)	BGS1267	950 ± 70	1000 A.D.
Feature 60 (Wood)	BGS1269	830 ± 70	1120 A.D.

Western Basin Springwells Phase

Dick (AaHp-1)		Reid 1983	
Feature 9 (Wood)	I13243	780 ± 100	1170 A.D.
Robson Road (AaHp-20)		Kenyon, Ferris and Hagerty 1988	
Feature 31 (Wood)	BGS1246	600 ± 70	1350 A.D.
Feature 64 (Wood)	BGS1247	600 ± 70	1350 A.D.
Belanger (AcHn-10)		Ferris and Crundwell 1988	
Feature 1 (Wood)	BGS1248	670 ± 70	1280 A.D.
Bellamy (AdHm-7)		Murphy 1987	
Feature 3 (Wood)	WAT1639	430 ± 75	1520 A.D.*
Feature 6 (Wood)	WAT1638	630 ± 75	1320 A.D.
Sherman (AdHl-16)		C. Murphy	
Feature 1 (Wood)	BGS1251	710 ± 70	1240 A.D.
Feature 8a (Wood)	BGS1250	580 ± 70	1370 A.D.

Ontario Iroquois Tradition Princess Point

Mohawk Chapel (AgHb-2)		Fox 1984a	
Unit N112E104 (Wood)		1520 ± 80	430 A.D.
Varden (AdHa-1)		MacDonald 1986	
Unit 80-97 L1-2 (Carbon crust)	RIDDL115	1440 ± 120	550 A.D.*
Unit 80-98 L1-2 (Carbon crust)	RIDDL116	1120 ± 240	830 A.D.
Unit 88-92 L4 (Wood)	RIDDL118	1560 ± 190	390 A.D.*
Unit 96-97 L4 (Carbon crust)	RIDDL119	2350 ± 160	400 B.C.*
Unit 96-97 L4 (Carbon crust)	RIDDL311	1330 ± 140	620 A.D.
Unit 95-95 L1-2 (Wood)	RIDDL312	300 ± 170	1650 A.D.*
Hunter (BdHh-5)		W. Fox	
Unit 9/10 (Carbon crust)	TO-1020	1100 ± 50	850 A.D.

Ontario Iroquois Tradition Glen Meyer

Boisclair (AfHh-28)		W. Fox	
Feature 4 (Wood)	I13533	760 ± 80	1190 A.D.

Varden (AdHa-1)		MacDonald 1986	
Unit 90-91 L1-2 (Wood)	RIDDL117	850 ± 190	1100 A.D.

Ontario Iroquois Tradition Middleport (Uren and Middleport phases)

Bonisteel (AfGu-2)		Jim and Sue Pengelly 1987	
Occupation Layer 1 (Wood)	BGS987	540 ± 120	1410 A.D.
Occupation Layer 1 Firepit (Corn)	BGS1130	460 ± 80	1490 A.D.
Willcock (AfHi-52)		D. Poulton	
Midden 51 (Wood)	NMC1331	890 ± 70	1080 A.D.*
490-495: Feature 5 (Wood)	NMC1335	895 ± 70	1075 A.D.*
Middleport (AgHa-2)		M. Ambrose	
80C9: Midden (Wood)	S2896	1025 ± 135	925 A.D.*
77B4: Midden (Wood)	S2901	1020 ± 135	930 A.D.*
71A16: Sand Ridge (Wood)	S2902	950 ± 60	1000 A.D.*
80C4: Midden (Wood)	S2897	920 ± 60	1030 A.D.*
29C3: Longhouse pit (Wood)	S2898	910 ± 60	1040 A.D.*
25F6: Longhouse pit (Wood)	S2899	885 ± 135	1065 A.D.*
80C12: Midden (Wood)	S2895	875 ± 60	1075 A.D.*
78G4: Midden (Wood)	S2900	865 ± 60	1085 A.D.*
Pipeline (AiGx-12)		Busby 1979	
Midden #2 (Wood)	UGA1905	545 ± 80	1405 A.D.
Reeb's Bay		J. Pengelly	
Hearth Feature (Wood)	BGS1242	250 ± 80	1700 A.D.*

Ontario Iroquois Tradition Prehistoric Neutral

Raymond Reid (AiHa-4)		W. Fitzgerald	
Midden 3 (Wood)	I13550	460 ± 80	1490 A.D.
Midden 1 (Wood)	I13551	430 ± 80	1520 A.D.
Midden 2a (Wood)	I13552	395 ± 75	1555 A.D.
Pond Mills (AfHh-2)		D. Poulton	
Midden 303: 490-240 Layer 2 (Wood)	NMC1331	545 ± 70	1405 A.D.
Midden 301: 495-185 (Wood)	NMC1335	470 ± 75	1480 A.D.
Savage (AdHm-29)		C. Murphy	
Feature 3 (Wood)	I13546	590 ± 80	1360 A.D.
Feature 5 (Wood)	I13547	530 ± 80	1420 A.D.

Acknowledgements

Many thanks to Jim Pengelly, Dana Poulton, Martin Cooper, Ian Kenyon, Peter Timmins, Carl Murphy and Bill Fox for discussing their dates; the concept of radio-carbon dating; or the general information provided here. Thanks also to Ian Kenyon for providing an editorial look through this article. Any pontificating, however, is purely the result and fault of the author.

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THE BELANGER SITE (AcHn-10): ONE ROUND PIT OF SPRINGWELLS PHASE PREHISTORY

Neal Ferris and David Crundwell

Introduction

In the Spring of 1982, David Crundwell visited his brother-in-law's farm just east of Paincourt, Dover Township, Kent County (Figure 1). While taking a walk south of the house, and just south of the Paincourt drain, David noticed a dark, circular stain in the recently cultivated field. Upon closer examination he saw that the stain contained numerous ceramic sherds, faunal material, and a large quantity of carbonized plant remains. As the field was about to be tile-drained, and recognizing the importance of the material in front of him, David carefully excavated a one meter square around this stain, screening ploughzone. When subsoil was reached, a small, circular pit, characterized by a black sandy fill, was discovered. The feature's plan was mapped, excavated along its long axis, and the profile then recorded (Figure 2). The feature was a shallow, basin-shaped pit, characterized by an artifact-rich layer on top of a solid layer of carbonized material, a large portion of which was maize, including kernels and cob fragments. Several soil samples were taken from each layer, then the remainder of the pit was excavated. No other pit stains could be seen in the vicinity of this feature, thus David's impromptu rescue excavation was concluded.

Nothing further happened until earlier this year, when the principal investigator visited David to examine his collection of Late Woodland material from Kent County, for the purpose of documenting the sites as part of the background research to the Western Basin Late Woodland chapter of the still-to-be-released Prehistory of Southern Ontario volume being put together by the London Chapter of the OAS (Murphy and Ferris n.d.). The collection was turned over, and brought back to London, where the site was registered, material analysed, and a portion of the carbonized wood submitted for a radio-carbon date. The following, then, is the result of that analysis.

Ceramics

From the Belanger site's one feature a suprising number of ceramic sherds were recovered, 158 in all. The ceramics tended to be thick and extremely friable. Very few mends could be made, however, at least five separate vessels could be identified from the pit's assemblage. Each vessel was defined by the presence of a rim sherd. For two of the five vessels, a single rim represents the only decorated sherd for that particular vessel. In fact, all five vessels were defined on the basis of a limited number of sherds. Thus no large vessel sections could be reconstructed in order to make a clear association between the decorated upper portions of these vessels, and the large, undecorated lower neck, shoulder and body fragments also found in the pit. A description of the decorative attributes for each of the vessels is provided in Table 1.

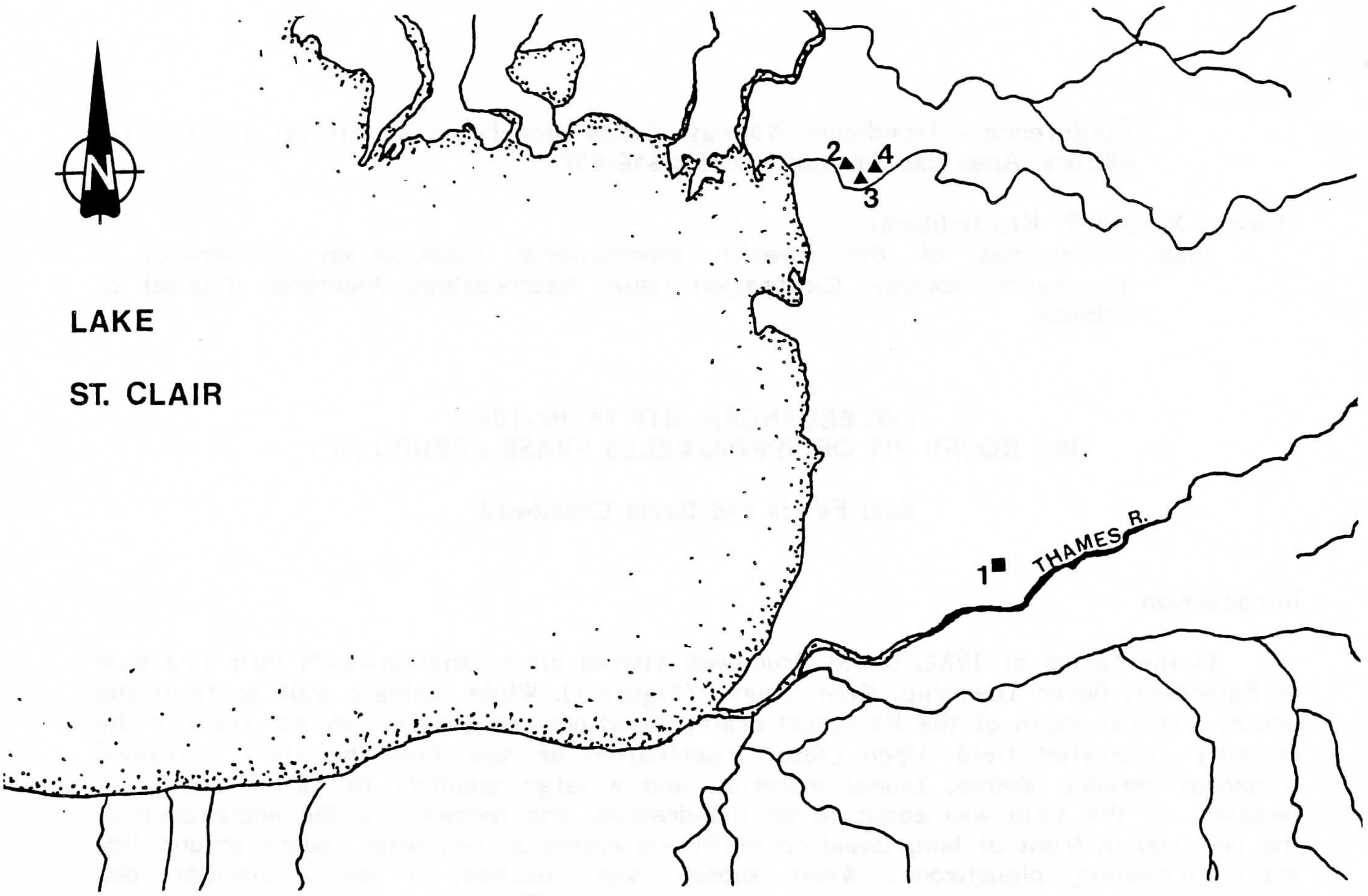

Figure 1: Springwells Phase Sites Documented Along the East Shore of Lake St. Clair. 1: Belanger; 2: Liahn I; 3: Rickley (Peterkin); 4: Burke.

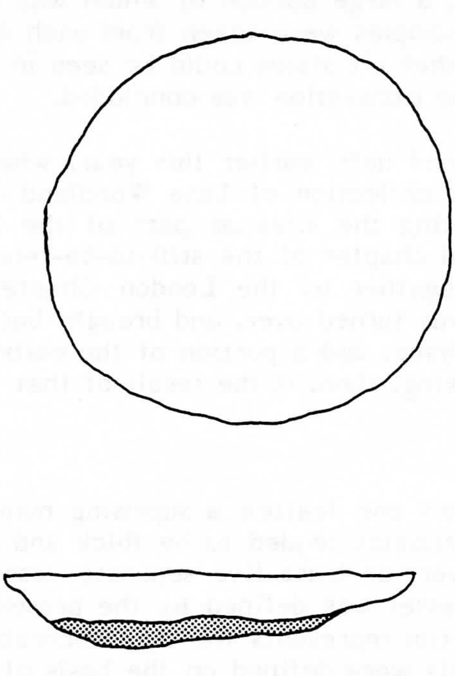

Figure 2: Pit Excavated at the Belanger Site. Stippled area represents a carbonized wood and maize layer.

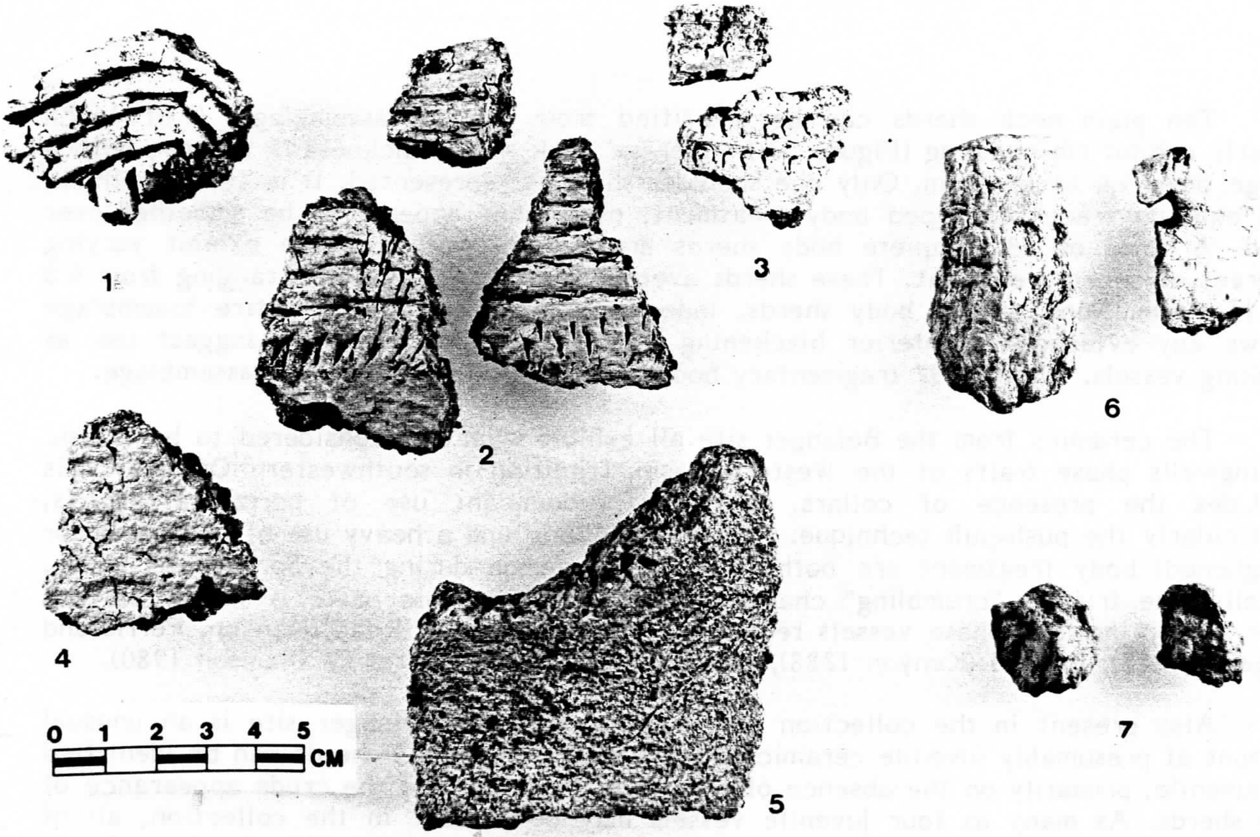

Figure 3: Ceramics Recovered From the Belanger Site Pit. 1-3: Identified Vessels 1-3; 4: Rib-paddled neck sherd; 5: Roughened or wiped body sherd; 6: Juvenile vessels; 7: Fired lumps of clay.

Only Vessel 2 from the Belanger pit provided enough representation to document upper vessel characteristics (Figure 3.2). This vessel is collared, with approximately seven rows of horizontal push-pull along the collar. The collar is 41.2 mm high, and 13.4 mm thick mid-way towards the lip. There is a single horizontal row of alternating tool tip impressions at the base of the collar, and it is the only upper neck decoration visible on the specimen. Of the remaining vessels, 1 and 3 also exhibit evidence of a collared rim, while vessels 4 and 5 are too fragmentary. Vessel 1 (Figure 3.1) and 4 also exhibit horizontal push-pull on the rim, while Vessel 3 has at least four horizontal rows of a curious "r"-shaped tool impression along its collar (Figure 3.3). Vessel 5 exhibits at least two rows of horizontal tool tip impressions. Vessel 1 (13.8 mm), 3 (12.6 mm), and 4 (13.6 mm) have thick rims, while vessel 5 (7.5 mm) is markedly thinner. Vessel 1 is unusual in that the interior of the rim exhibits roughening, or wiping, a method of vessel wall treatment usually reserved for exterior body surfaces.

Table 1: Decorative Attributes of the Belanger Site Ceramic Vessels.

*	Primary Tool	Rim Exterior	Secondary Tool	Lip	Interior	Upper Neck	Cast.
1	Push-pull	Horizontals/Obliques		Plain	Plain	[Missing]	Yes
2	Push-pull	Horizontals	Tool Tip Impressions	Obliques	Obliques	Obliques	No
3	Tool Impressions	Horizontals		Plain	Plain	Plain	No
4	Push-pull	Horizontals		Encirling line	Plain	[Missing]	No
5	Tool Impressions	Horizontals	Tool Impressions	Plain	Obliques	[Missing]	Yes

Ten plain neck sherds can be identified from the pit assemblage, 4 of which clearly exhibit rib-paddling (Figure 3.4). Average neck sherd thickness is 9.5 mm, with a range from 5.6 to 14.9 mm. Only one shoulder sherd is represented. It is 16.2 mm thick, and exhibits traces of wiped body treatment, over what appears to be smoothed-over cord. A total of 33 complete body sherds are present, all of which exhibit varying degrees of wiped treatment. These sherds average 9.6 mm in thickness, ranging from 4.8 to 15.3 mm. None of the body sherds, indeed no sherd within the entire assemblage shows any evidence of interior blackening or of carbonized crust to suggest use as cooking vessels. Another 97 fragmentary body sherds are part of the site assemblage.

The ceramics from the Belanger site all exhibit what are considered to be classic Springwells phase traits of the Western Basin Tradition in southwestern Ontario. This includes the presence of collars, and the predominant use of horizontal motifs, particularly the push-pull technique. Also, rib-paddling and a heavy use of the wiped (or roughened) body treatment are both techniques common during the Springwells phase. Finally, the friable, "crumbling" characteristic of the ceramic paste is similar to that seen for Springwells phase vessels recovered from the Robson Road (Kenyon, Ferris and Hagerty 1988), Liahn I (Kenyon 1888), and Rickley (Peterkin) sites (Williamson 1980).

Also present in the collection of ceramics from the Belanger site is an unusual amount of presumably juvenile ceramics (Figure 3.6). Twenty-six sherds can be identified as juvenile, primarily on the absence of temper in the clay, and the crude appearance of the sherds. As many as four juvenile vessels may be present in the collection, all of which appear to be "thumb-pot" in shape. None of the juvenile sherds showed any evidence of use.

Finally, a total of 29 ceramic fired clay lumps (51.2 gr) were also found (Figure 3.7). A few show evidence of pinched, striated or brushed surfaces, and may be fragments of daub. Over 17 kg of fired clay lumps were found at the nearby Liahn I site (Kenyon 1988: 15).

Lithics

A small quantity of lithic debitage was recovered from the feature (34.9 gr): 23 pieces of Onondaga chert debitage, 2 of Bayport chert, and one small fragment of Upper Mercer chert. None of the flakes exhibit use wear. Also present are two Onondaga chert nodule fragments, partially flaked. In addition there is an Onondaga "core", probably the remnant of a well-worked chert nodule. This specimen exhibits a wide area of pot-lidding, due to heat. A hideous biface fragment of Onondaga chert is also represented in the collection. This specimen is marked by a large hole, caused by a leached inclusion in the chert, and on two of the remaining sides, exhibits large step fractures. Any consideration of possible use for the specimen in question would be a humourous, but unprofitable effort. In addition to the chert assemblage, there is a tip of a slate adze or celt, as well as 318.8 grams of fire-cracked rock.

Faunal Remains

A total of 29.8 grams of faunal material was recovered from this pit, 25.9 grams of which consist of highly fragmented, calcined bone. Very little can be said of the material. Most of the bone appears to be mammal. In particular, at least one fragment is definitely deer, while a portion of a raccoon ulna was also identified (C. Dodd, pers. comm.). As well, one bone fragment is obviously from a turtle, while another fragment is from an unidentified fish species.

Floral Remains

Wood charcoal was recovered from the Belanger feature, a sample of which was sent to Howard Melville of Brock University for radio-carbon dating (see below). The remainder of the wood charcoal includes fragments of beech, black ash, slippery elm, white elm, sugar maple, basswood, and hickory (C. Murphy, pers. comm.). Beech is by far the most abundant, followed by the ash and two elm species. These species are not unusual, considering the general terrain of the area: generally flat, with abundant low, wet areas, interspersed with small, dry sand ridges and knolls, particularly along the edges of creeks and drains.

Also present in the pit is a fair quantity of carbonized maize. The identified maize are all fragments of 8-rowed northern flint maize (C. Murphy, pers. comm.). This includes 10.5 grams of cob fragments and 5.1 grams of whole and fragmentary kernels. While three cob fragments still maintain their entire circumference, only one is from the mid-section of the cob. Its diameter is 15.5 mm.

Discussion

Any discussion of the Belanger site must be restricted to general observations, due to the limited extent of what is known for the site.

Clearly, the diagnostic material culture recovered from this small pit is related to the Springwells phase of the Western Basin Tradition (Fitting 1965; Murphy and Ferris n.d.). This assignment is reinforced with the results of a single radio-carbon sample run from the feature. Conducted at Brock University (BGS1248), the resulting date is 670 ± 70 B.P. The uncorrected calendrical date is 1280 A.D. When considered with 8 other dates run recently (Ferris infra.), and the Springwells dates from Liahn I (Kenyon 1988), and the one applicable date from Bruner-Colisanti (Lennox 1982), it is abundantly evident that the Springwells phase is firmly positioned within the 13th and 14th centuries AD, at least in southwestern Ontario.

The pit and its contents suggest that it was used for depositing refuse. David Crundwell reported that he saw very little other material on the surface of the field adjacent to this one pit, so it is probable that the Belanger site is a very small encampment. Very little can be said about the function or seasonality of the site, other than it was possibly a short-term occupation, and probably related to a specific activity. The relative abundance of juvenile ceramics, as well as the lack of "used" ceramic vessels in the pit assemblage, may suggest that pottery was being produced at the site, and waste material then placed in the pit. Perhaps what is most striking, and thus most important, about the site is that it is part of a fairly substantial Springwells occupation known for the eastern shore of Lake St. Clair. While little systematic survey has occurred in the area, several sites are known for the northern part of the region (Figure 1), and several other, undocumented Springwells phase sites located up and down the east shore of Lake St. Clair are known from local collections (F. Vink, pers. comm.). What is also intriguing is that these same local collections exhibit very little in the way of either Riviere or Younge phase material, even though a short distance to the east along the Thames River dozens of sites from this earlier period, as well as Springwells phase sites, are known.

It is possible that these Springwells phase sites reflect a subsistence strategy developed for the particularly rich and diverse environment of the east shore of Lake St. Clair. As Kenyon has noted for the Liahn I site, its location is ideal for exploiting several diverse environments during warm weather months (1988: 20). Faunal remains from that site argue for a lacustrine orientation in subsistence practices, augmented by a diversity of mammal species and maize. At Belanger, our one pit cannot adequately define the role of the site, however a number of alternatives can be raised for consideration. It may be that the site was a satellite, extractive camp, occupied by a few members from a site such as Liahn I. The role of the site therefore would be short-term, designed to recover a specific resource, probably during its period of abundance. A variant to this suggestion might be that, in light of the large quantity of juvenile and "unused" ceramics, perhaps the Belanger site occupants were primarily female, and that the site may have functioned as a special-purpose camp, perhaps where female and infant residents from a larger community went during the summer to tend horticultural fields. However, if one considers the lack of fish in the Belanger feature as being significant, it may argue against the first two possibilities since, if the site was occupied during warm weather months, and affiliated to a larger, fish procurement site such as Liahn I, or fishing out of the adjacent Paincourt Creek, then one might reasonably expect to find a high percentage of fish remains in the Belanger pit. Alternatively, then, one might suggest that the site was not occupied during warm weather, and perhaps may have been a fall or winter camp site. This would explain both the lack of fish and presence of calcined, pulverized mammal bone, and perhaps also account for the quantity of lithics in the feature, as well as the probable small size of the site area. Unfortunately, the lack of available data limits this discussion to conjecture. The Belanger site is an important piece of the puzzle surrounding Springwells phase occupation of the eastern shore of Lake St. Clair, but one piece does not solve the puzzle. Systematic survey of the region, and perhaps some attention to the smaller sites such as Belanger is required in order to clarify the relationship between the eastern shore of Lake St. Clair and the settlement-subsistence strategies of the Springwells phase people who lived there.

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******** RADIOCARBON ARTICLE ADDENDUM *********

(Sorry Bob, you missed me by no more than ten minutes!!!)

As fate would have it, after dropping off the newsletter to the printers I found waiting for me a series of carbon dates provided by Bob Pearce of the Museum of Indian Archaeology. While too late to be included in the main article, these dates are provided here for your further consideration. They come from three multi-component sites in southeast London. While none of the samples were directly associated with diagnostic material, corroborating diagnostic material from the surrounding areas on each of the sites confirmed date affiliations, as accepted by the researcher. For present purposes, the cultural occupation felt to be associated with a date is provided.

West Bog (AfHh-82)			
435-545, F.8 (Wood)	S2956	795 ± 95	1155 A.D.*
435-545, F.8 (Wood)	S2957	1010 ± 90	940 A.D.*
East Bog (AfHh-83)			
390-635, F.1 (Wood)	S2958	3460 ± 120	1510 B.C.
(Accepted as dating a Late Archaic Broadpoint occupation)			
420-625, F.1 (Wood)	S2959	770 ± 95	1180 A.D.
(Accepted as dating a Middle Iroquoian occupation).			
420-655, F.1 (Wood)	S2960	905 ± 90	1045 A.D.
(Accepted as dating an isolated feature cluster lacking diagnostic material)			
380-640, F.2 (Wood)	S2961	1395 ± 100	555 A.D.
(Accepted as dating a Middle Woodland occupation).			
North Bog (AfHh-84)			
Midden 52, SS. 14 (Wood)	S2962	445 ± 95	1505 A.D.
(Accepted as dating a Middle Iroquoian occupation).			
Midden 53, SS. 10 (Wood)	S2963	555 ± 95	1395 A.D.
(Accepted as dating a Middle Iroquoian occupation).			

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